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New York District

New York and New Jersey Harbor

One estuary, One port, One vision

North Shore Waterfront Conservancy, March 25, 2006

Harold J. Hawkins, P.E.

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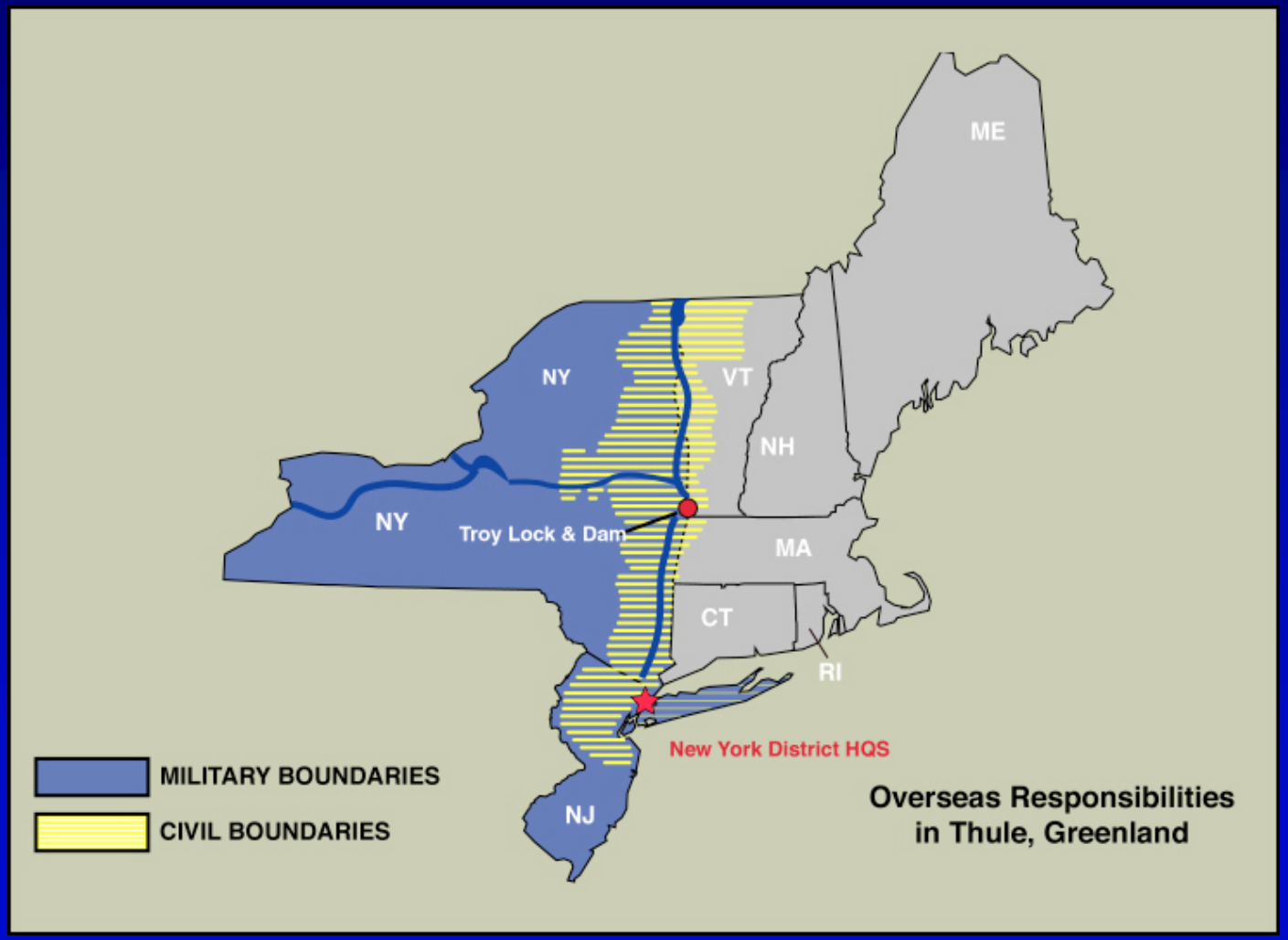
Military Program and Civil Works Projects



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Federal Navigation Channels within Port of NY & NJ

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Significance of The Port of New York and New Jersey

- Largest Port on the East Coast (59% share)
  - 3rd in US (13% share); 14th in World
- $114.5 billion in cargo
- 728,000 automobiles
- 230,000 jobs
- $9.4 billion in port region wages
- $2.2 in NY/NJ state and local tax revenue
- 35 percent of US population served

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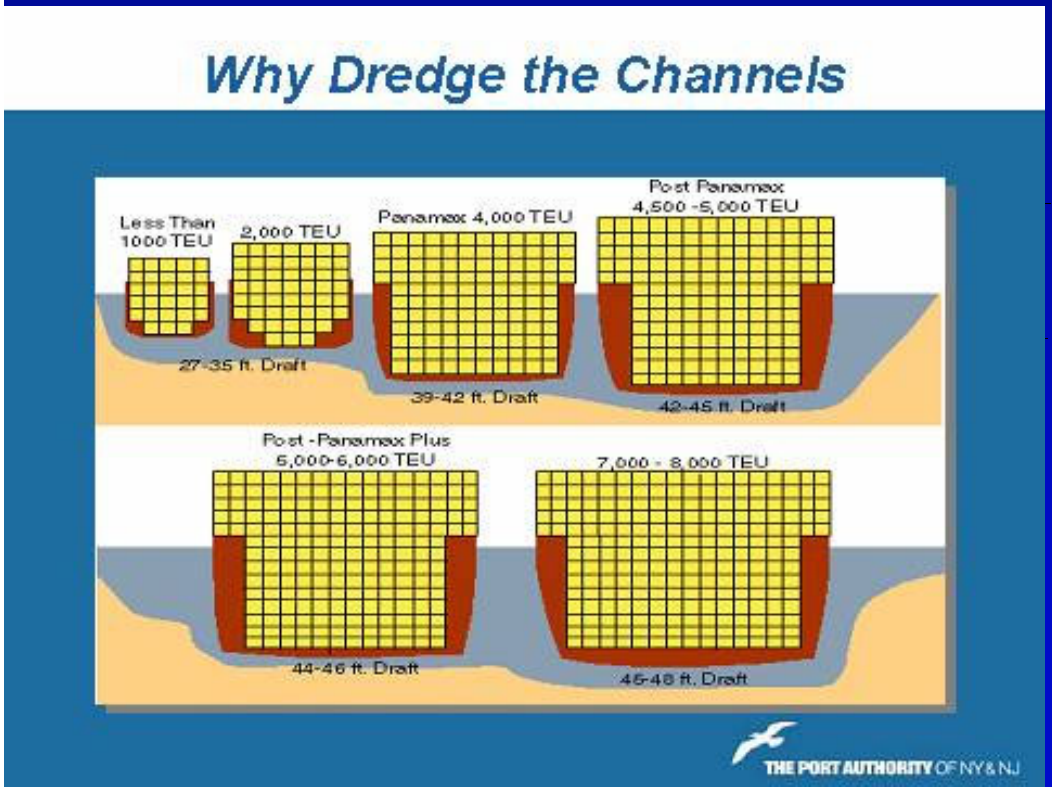
Problem Identification

- The existing channels were not adequate for the current and projected fleet of vessels.
- Transportation cost savings to be realized from improved channels would promote National Economic Development Goals.



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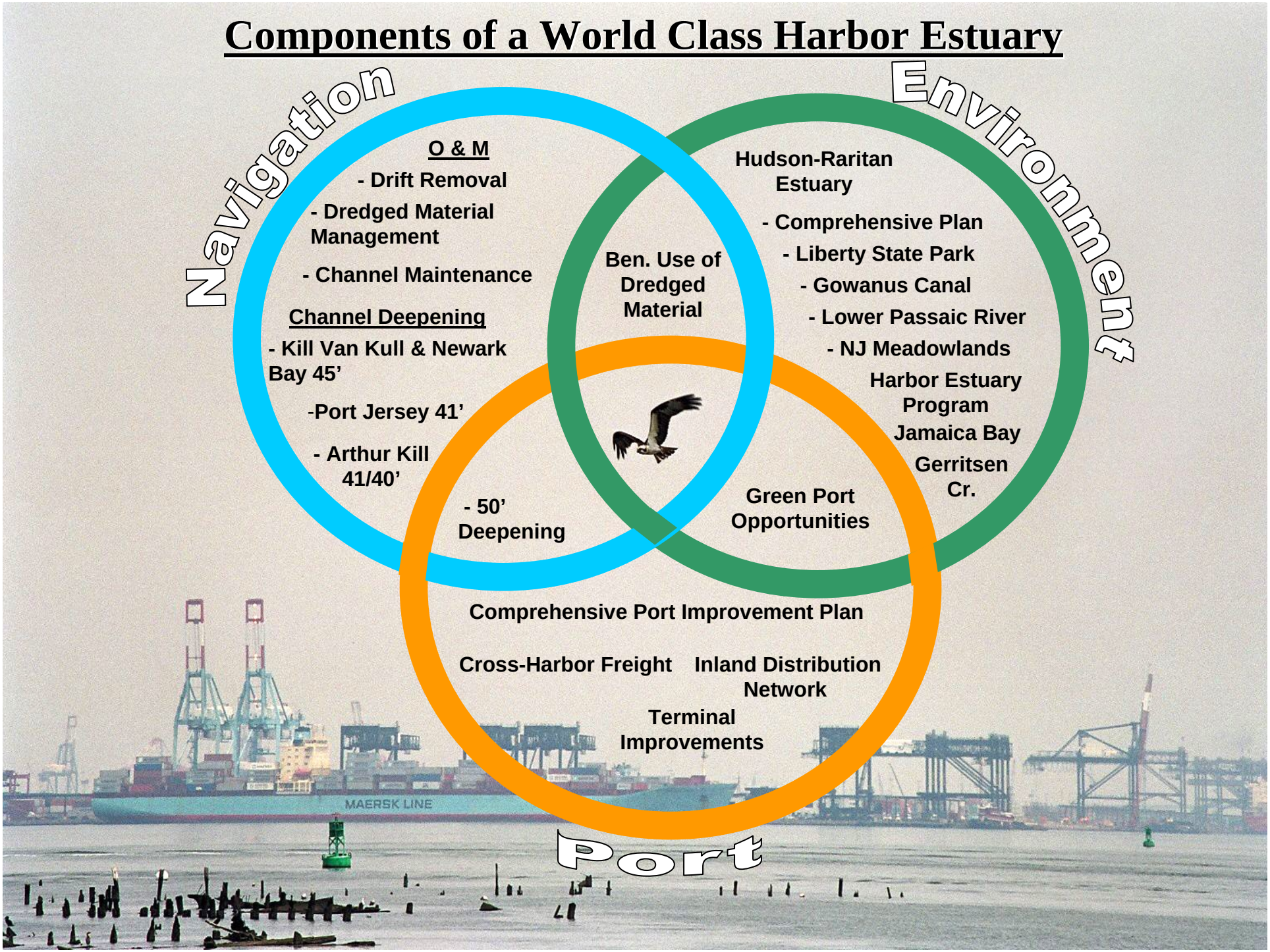
NY/NJ Harbor Partnerships

Unique agency partnership to address challenging environmental, navigation, and social issues and opportunities within the Port of New York New Jersey

- *USACE*
- *The Port Authority Of New York and New Jersey*
- *USEPA*
- *NMFS*
- *USCG*
- *State of New York (ESDC, NYSDEC,NYSDOS)*
- *State of New Jersey (DOT-OMR, NJDEP)*
- *City of New York (EDC, DEP)*
- *Non-governmental (Env. Defense, NRDC, Baykeeper, etc…)*

Empire State
Development Corporation

Components of a World Class Harbor Estuary



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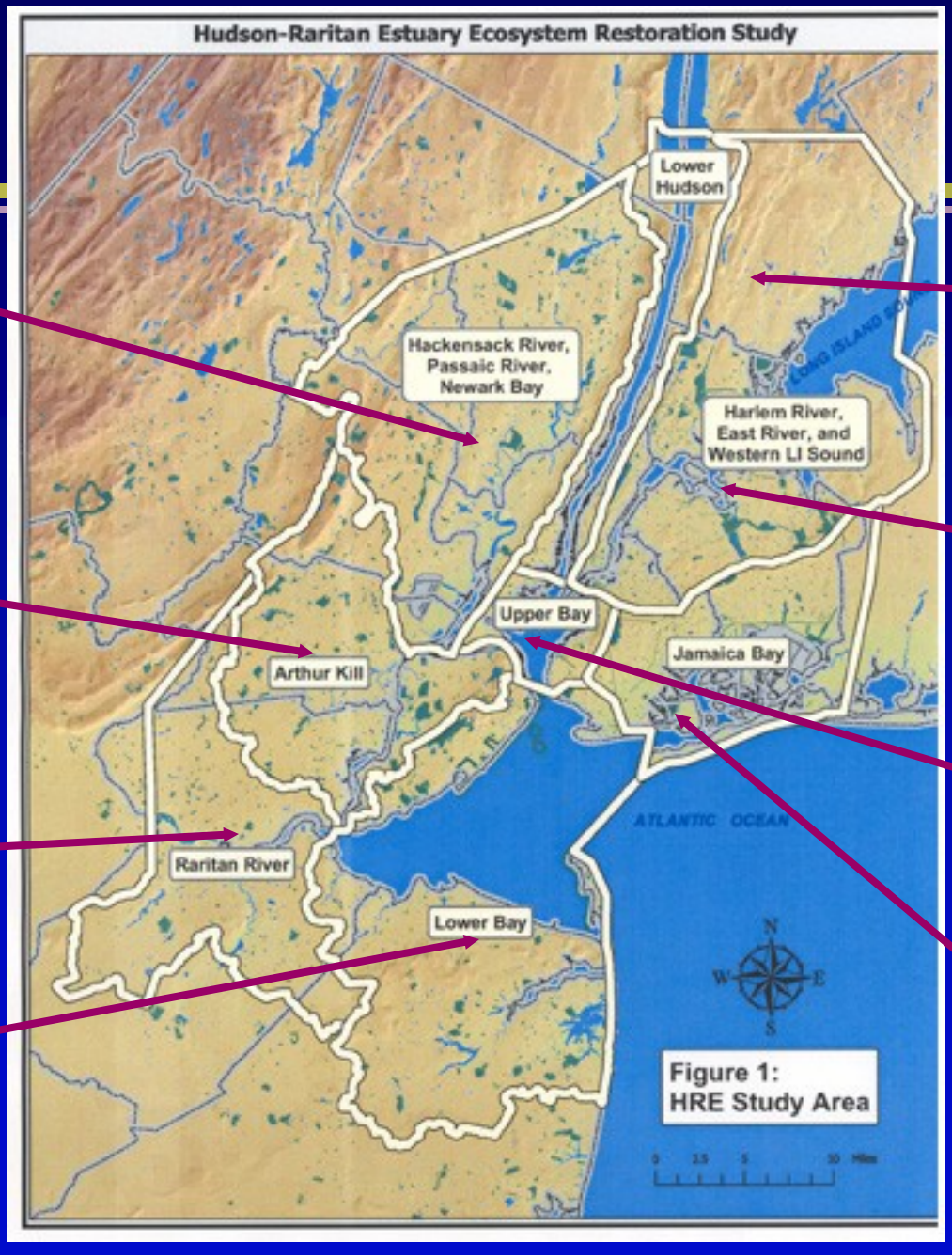
Hudson Raritan Estuary (HRE) Study Area



Hackensack River,
Passaic River
Newark Bay

Arthur Kill

Raritan River

Lower Bay

Lower Hudson

Harlem River,
East River and
Western LI
Sound

Upper Bay

Jamaica Bay

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Creating and Enhancing Area Wetlands

Jamaica Bay and Keyspan Corporation Sites

Goals:

- Restore the environment by re-establishing tidal flow
- Improve water and sediment quality
- Promoting the return of native fish and wildlife
- Improve air quality
- Ultimately improve recreational opportunities for area residents

How:

- Clear, Excavate, dispose of phragmites or common ferns
- Grade and plant native species

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New York & New Jersey Harbor

Interim Deepening Projects:

- Kill Van Kull & Newark Bay Channels (45 ft)
  - Cost: $335 million (8 contracts)
  - Completed: Nov 2004
- Arthur Kill Channel (41/40 feet)
  - Cost: $195 million (3 contracts)
  - Scheduled completion: Dec 2006
- Port Jersey Channel (41 feet)
  - Cost: $119 million (3 contracts)
  - Scheduled completion: August 2007

50 Ft Deepening Project:

- Cost: $1.6 billion (15 contracts)
- Scheduled completion: FY 2013

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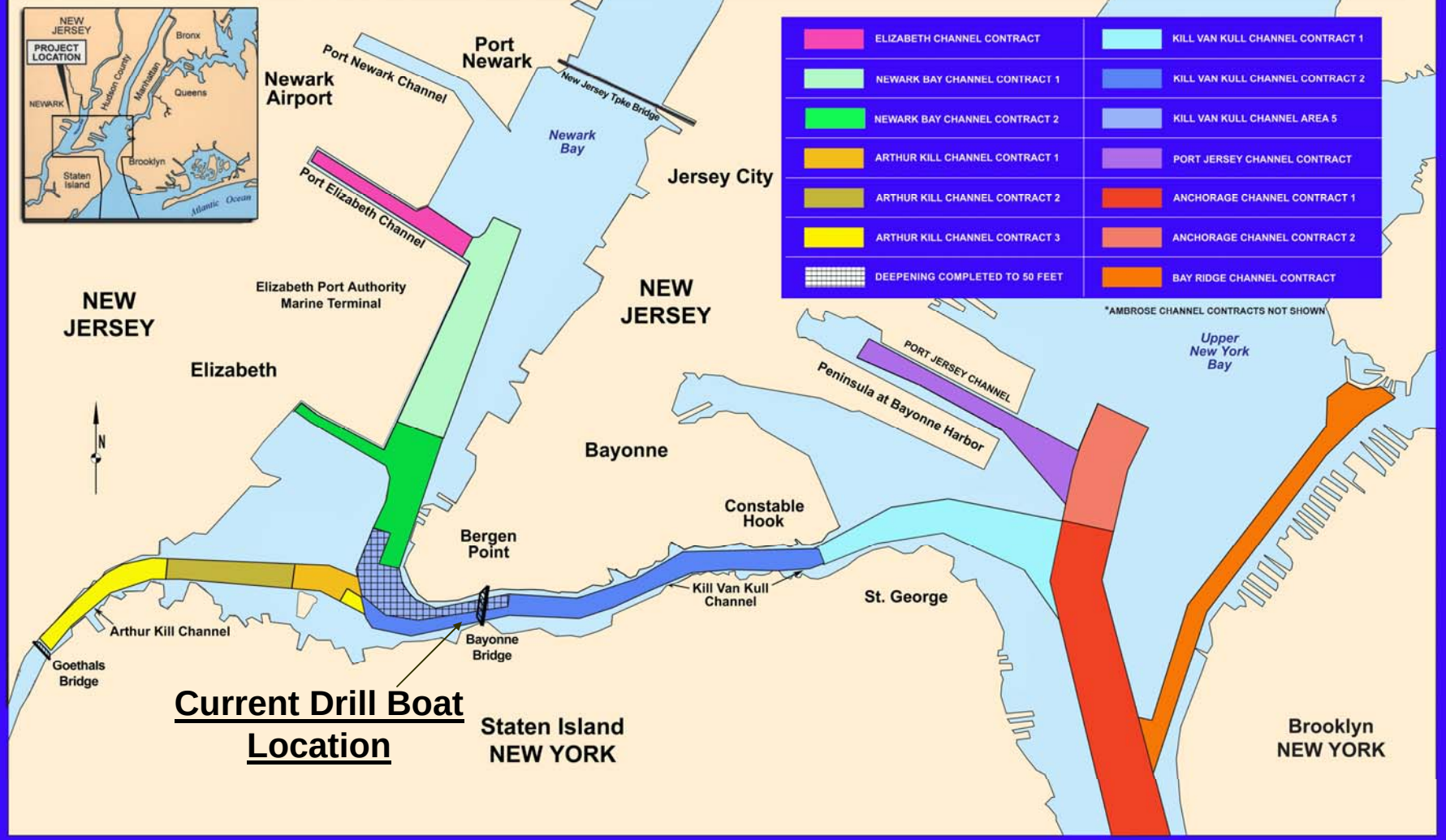
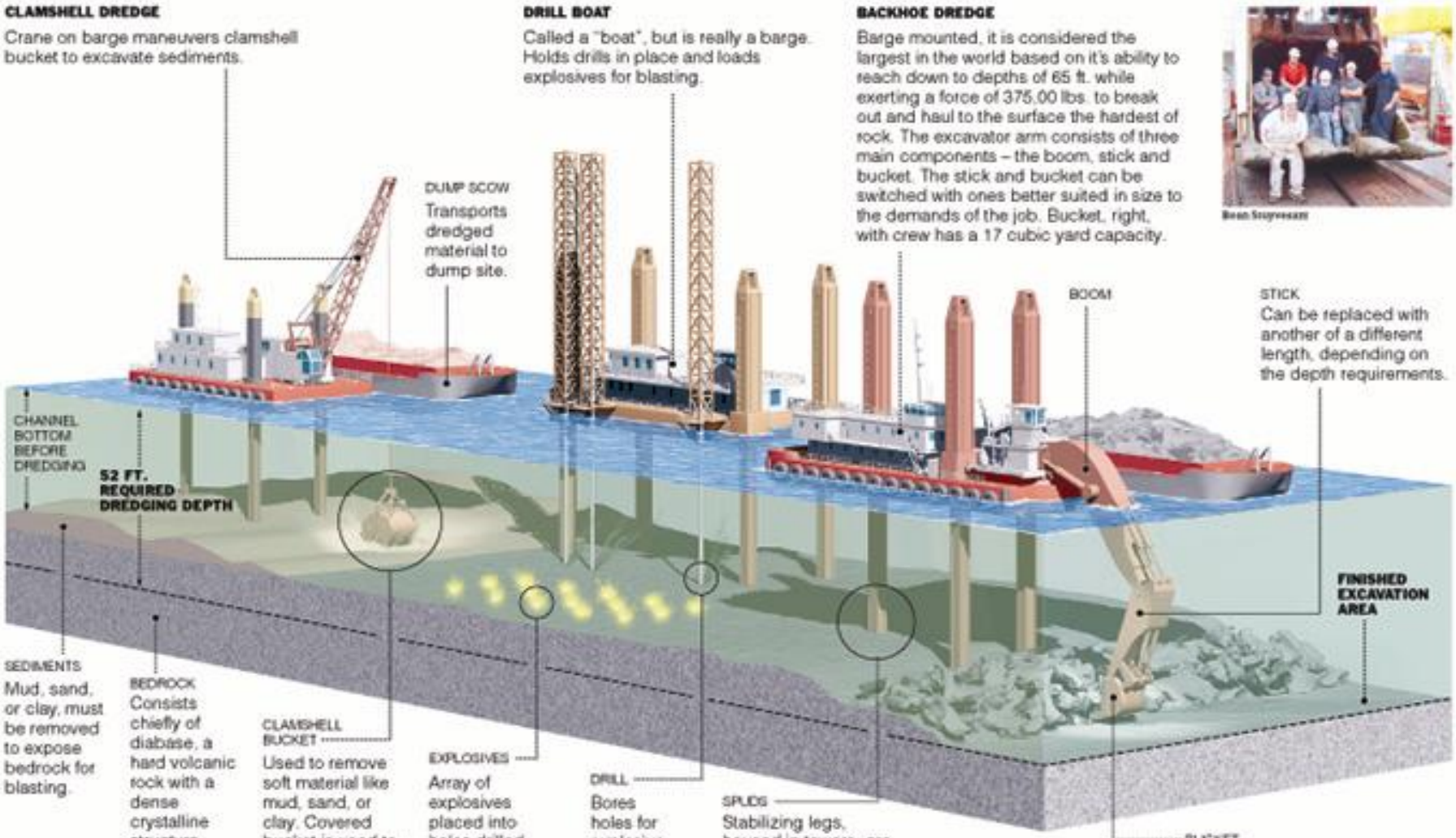
NEW YORK AND NEW JERSEY 50’ HARBOR DEEPENING PROJECT



Making the Cut

The lineup of equipment used in dredging the Kill Van Kull.



Sources: Frank Belissimo, Project Manager, Bean Stuyvesant, The Port Authority of New York and New Jersey

A.J. Cronkleton/The New York Times

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Working Equipment
Drill Boats in Newark Bay

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Working Backhoe Dredges

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Monitoring the Drilling and Blasting Vibrations and Noise Levels

Quality Assurance Standards

- 14+ seismographs in Staten Island- roving units and stationary
- 7+ noise monitors- roving units and stationary
- 586 Pre-Blast Inspection Notification letters mailed in Staten Island
- 55 requested and 47 completed inspections
- 39 noise/damage complaints since start of test drilling and blasting in August 2005

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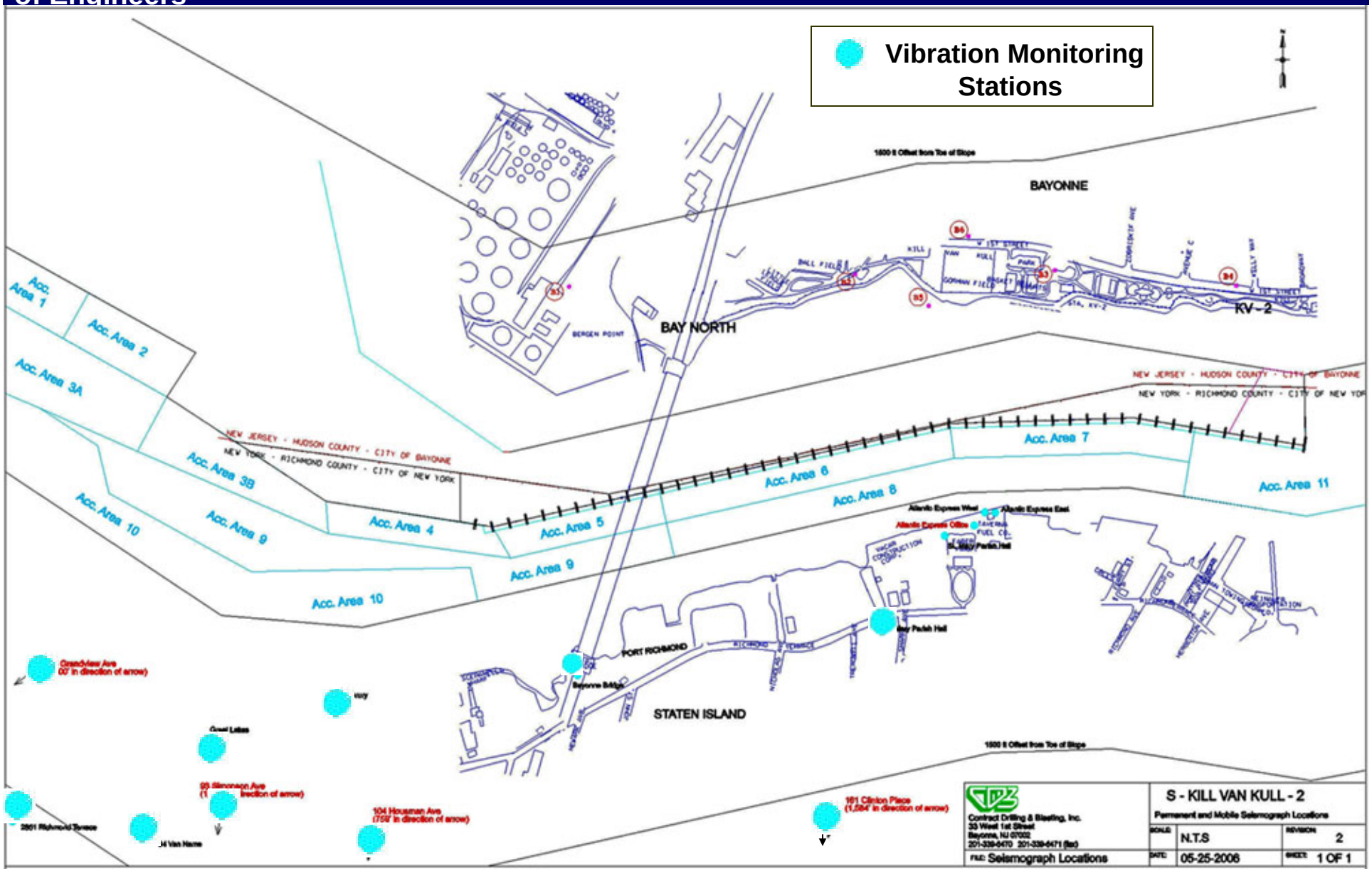
Regular Vibration Monitoring Stations (Levels Monitored within 1500 Feet of Equipment)



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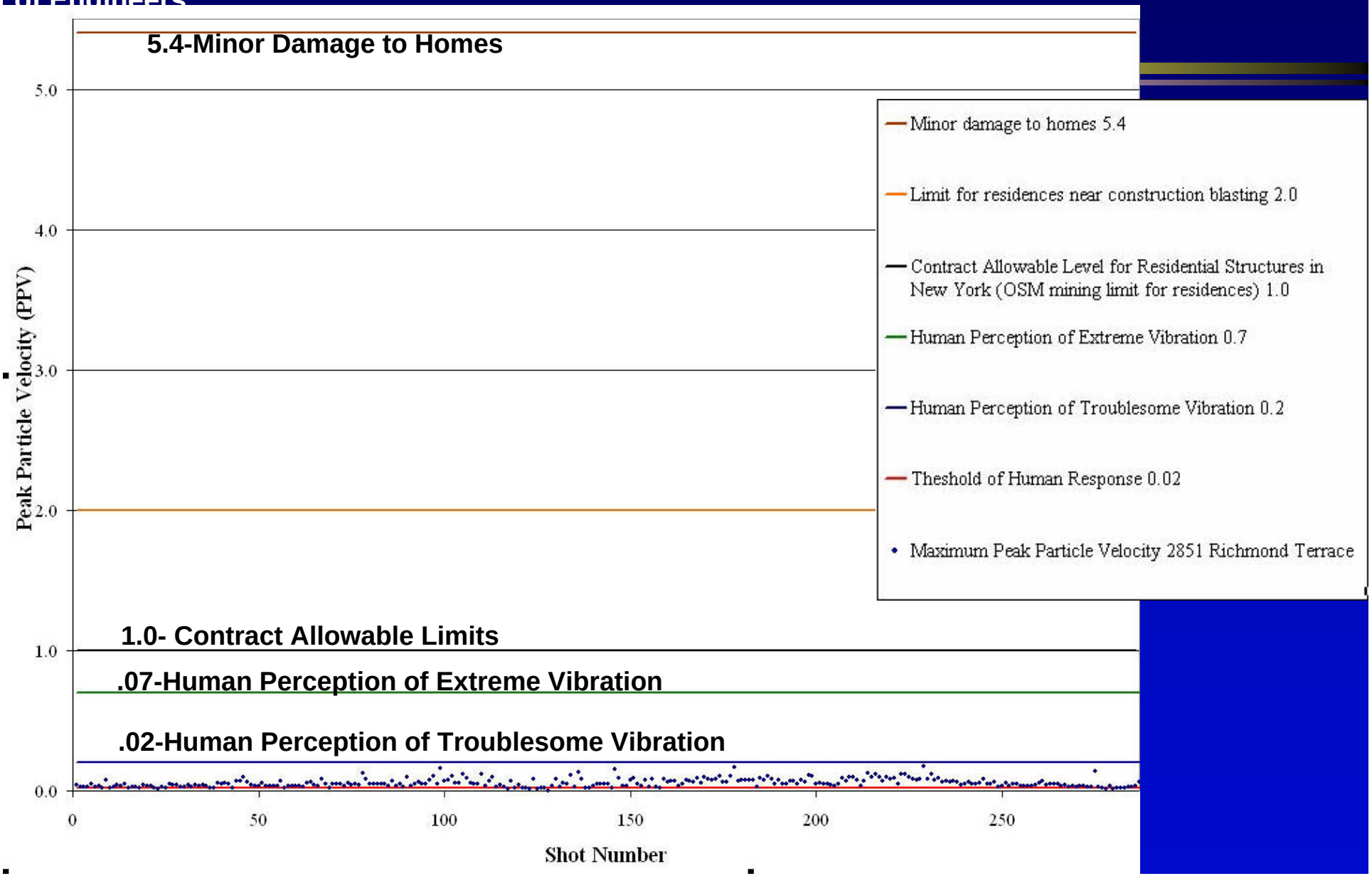
Vibration Data (Station 2851 Richmond Terrace)



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Summary of Vibration Monitors
Peak Particle Velocity- at 2851 Richmond Terrace

Peak Particle Velocity 2851 Richmond Terrace			
Peak Particle Velocity (PPV) Range		Number of Shots	Percentage
Low	High		
0.0	0.1	264	92%
0.1	0.2	23	8%
0.2	0.3	0	0%
0.3	0.4	0	0%
0.4	0.5	0	0%
0.5	0.6	0	0%
0.6	0.7	0	0%
0.7	0.8	0	0%
0.8	0.9	0	0%
0.9	1.0	0	0%

- 264 Total Shots
- 92% between 0.0 and .1 PPV (Peak Particle Velocity)
- 1.0 PPV is contract allowable limits
- 5.4 PPV is level of vibration that may cause damage to homes
(Source: Bureau of Mines Bulletin 656)

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Monitoring the Drilling and Blasting Vibrations and Noise Levels

Noise Monitors

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Regular Sound Monitoring Stations
(Levels Monitored within 1500 Feet of Equipment)

Staten Is. Locations	
1	Richmond Terrace @ South
2	Richmond Terrace @ DeHart.
3	Richmond Terrace @ Granite/Winant
4	Richmond Terrace @ Faber
5	Richmond Terrace @ Port Richmond
6	Richmond Terrace @ Broadway
7	Richmond Terrace @ Bard
8	Richmond Terrace @ Snug Harbor
9	Richmond Terrace @ Franklin
10	Richmond Terrace @ St. Peters Place

Bayonne Locations	
11	West 1st St @ Ave. A
12	West 1st St @ Humphrey
13	West 1st St @ Zabriske
14	West 1st St @ Broadway
15	East 1st St. @ Lexington

Bean Stuyvesant

Sound Level Readings- Livingston, Staten Island

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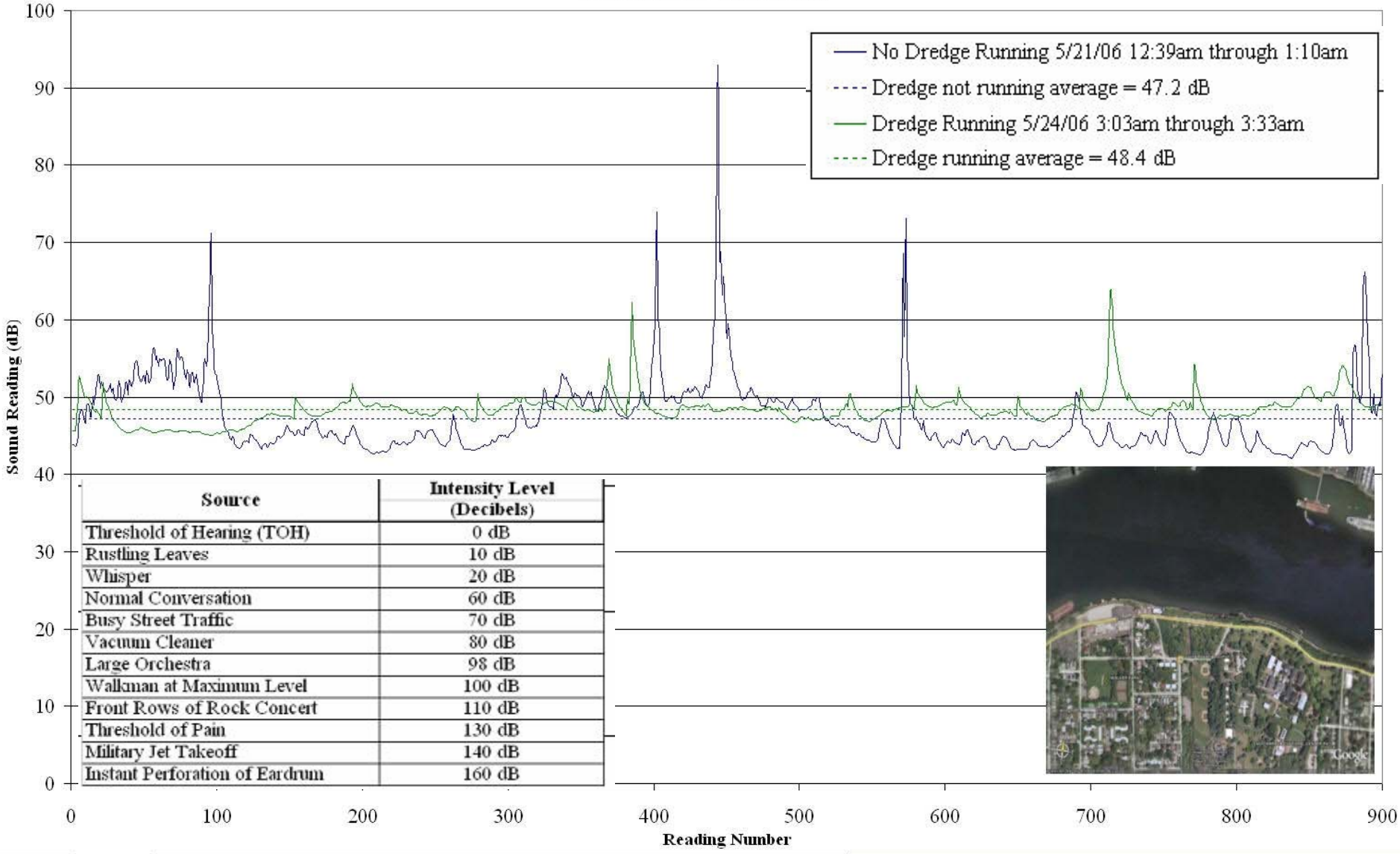
Sound Level Readings

(Livingston Area - Staten Island)



Source	Intensity Level (Decibels)
Threshold of Hearing (TOH)	0 dB
Rustling Leaves	10 dB
Whisper	20 dB
Normal Conversation	60 dB
Busy Street Traffic	70 dB
Vacuum Cleaner	80 dB
Large Orchestra	98 dB
Walkman at Maximum Level	100 dB
Front Rows of Rock Concert	110 dB
Threshold of Pain	130 dB
Military Jet Takeoff	140 dB
Instant Perforation of Eardrum	160 dB

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Follow up Process

- During dredging project contact Contract Drilling and Blasting at (201)-339-6470 or the Kill Van Kull Field Office (201)-433-9232 to register concerns

- Final determination of any claims will be determined once contract is complete

- Final determination letter, which includes the assessment of the alleged damage claim and the course of action, if any, that will be taken mailed to residents that registered a complaint

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Follow up Process

- If residents dispute findings, they can meet with contractors and Corps to review claim on one-on-one basis and are encouraged to have insurance representative present at meeting

- After meeting with the Corps, contractor and their homeowners insurance companies and residents still believe government is at fault, can file a claim by contacting:

Office of Counsel

26 Federal Plaza Room 1837

New York City, New York 10278-0090

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Upcoming Schedule

- Drilling and Blasting in contract area to last until end of 2006
- Blasting occurs between sunrise and sunset- schedule available online at http://www.nan.usace.army.mil/harbor/blast/index.htm
- Dredge Maricavor and Tauracavor are being modified with sound mufflers and will start dredging in area in mid-June
- Scows continue to be lined with wood to minimize noise

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Committed to….

- Continuous monitoring of vibration levels and noise levels throughout the duration of contract
- Program designed to minimize impacts to the local community
- Open lines of communications between residents and project field offices

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References for Vibration Standards

- The Effects of Vibrations and Environmental Forces (A Guide for the Investigation of Structures), International Society of Explosives Engineers, Cleveland, OH USA
  - Bureau of Mines Bulletin 656-- 5.4 PPV inches per second as the limit for “Minor damage to the average house subjected to quarry blasting vibrations”-- http://hpa.osmre.gov/arblast/

- Bureau of Mines Bulletin 656, Bureau of Mines Bulletin 8507, various codes, specifications, and regulations, also allowed by Office of Surface Mines for frequencies above 30 Hz --2.0 inches per second listed as the limit for “widely accepted limit for residences near construction blasting and quarry blasting”

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Contact Information:

- Harold Hawkins, P.E. (917) 790–8204: Project Manager, US Army Corps
- Kill Van Kull Field Office; (201)-433-9232
- Contract Drilling and Blasting; Noise and Damage concerns 201-339-6470
- Carolyn Vadino, Public Affairs, US Army Corps, 917-790-8306
- *Visit Us at http://www.nan.usace.army.mil/harbor/index.htm*